

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-16 (canceled).

17. (currently amended) A method for preserving configuration data during firmware modification, said method comprising:

- a) establishing a direct serial connection between a firmware device and a download computing device;
- b) establishing a network connection between said download computing device, a web-based device administration utility on a web server and said firmware device;
- c) uploading firmware configuration data, over said network connection, from an existing firmware structure in said firmware device to said web server using said web-based administration utility, wherein said web-based administration utility performs said uploading by pulling data from said existing firmware structure by executing code that resides solely on said web-based administration utility and without executing code on loading any software onto said firmware device;
- d) storing said firmware configuration data on said web server;
- e) erasing firmware, including said firmware configuration data, from said firmware device, by executing code that resides solely on said web-based administration utility and without executing code on said firmware device;

- f) loading a new firmware structure from said download computing device to said firmware device over said direct serial connection, by executing code that resides solely on said web-based administration utility and said download computing device and without executing code on said firmware device;
- g) loading said firmware configuration data from said web server to said firmware device over said network connection, by executing code that resides solely on said web-based administration utility and said download computing device and without executing code on said firmware device.

18. (previously presented) A method as described in claim 17 further comprising converting said configuration data to a format compatible with said new firmware structure using said web-based device administration utility on said web server prior to said loading said firmware configuration data.

19. (previously presented) A method as described in claim 17 further comprising modifying said configuration data with said web server prior to said loading said firmware configuration data.

20. (previously presented) A method as described in claim 17 further comprising querying network elements to ascertain additional configuration data needed by said new firmware structure.

21. (previously presented) A method as described in claim 20 further comprising  
combining said additional configuration data with said configuration data  
using said web-based device administration utility on said web server prior to  
said loading said firmware configuration data.

22. (currently amended) A system for preserving configuration data during firmware  
modification, said system comprising:

- a) a firmware device;
- b) a download computing device;
- c) a web-based device administration utility on a web server;
- d) a direct serial connection between said firmware device and said download  
computing device;
- e) a network connection between said download computing device, said web-  
based device administration utility on a web server and said firmware device;
- f) an uploader for uploading firmware configuration data, over said network  
connection, from an existing firmware structure in said firmware device to said  
web server using said web-based administration utility, wherein said web-based  
administration utility performs said uploading by pulling data from said existing  
firmware structure without loading any software onto said firmware device, by  
executing code that resides solely on said web-based administration utility and  
without executing code on said firmware device and wherein said firmware  
configuration data is stored solely on said web server;
- g) storage, on said web server, for storing said firmware configuration;

- h) an eraser process for erasing firmware, including said firmware configuration data, from said firmware device, by executing code that resides solely on said web-based administration utility and without executing code on said firmware device;
- i) a firmware loader for loading a new firmware structure from said download computing device to said firmware device over said direct serial connection wherein said firmware loader performs said loading by pushing data to said firmware device without loading any software onto said firmware device, by executing code that resides solely on said web-based administration utility and said download computing device and without executing code on said firmware device;
- j) a configuration loader for loading said firmware configuration data from said web server to said firmware device over said network connection wherein said configuration loader performs said loading by pushing data to said firmware device without loading any software onto said firmware device, by executing code that resides solely on said web-based administration utility and said download computing device, without executing code on said firmware device and without using memory on said firmware device.

23. (previously presented) A system as described in claim 22 further comprising a converter for converting said configuration data to a format compatible with said new firmware structure using said web-based device administration

utility on said web server prior to said loading said firmware configuration data.

24. (previously presented) A system as described in claim 22 further comprising a modifier for modifying said configuration data with said web server prior to said loading said firmware configuration data.

25. (previously presented) A system as described in claim 22 further comprising a query process for querying network elements to ascertain additional configuration data needed by said new firmware structure.

26. (previously presented) A system as described in claim 25 further comprising a combiner for combining said additional configuration data with said configuration data using said web-based device administration utility on said web server prior to said loading said firmware configuration data.